

WHAT IS CLAIMED IS:

1. An image forming apparatus comprising:

light emission means for emitting a light beam;

scanning control means for controlling scanning of
5 the light beam emitted by the light emission means;

first light emission control means for controlling
a light emission timing of the light emission means on
the basis of a reference clock by a timing prepared in
advance;

10 second light emission control means for
controlling the light emission timing of the light
emission means in correspondence with image data of one
line in a main scanning direction on the basis of a
generation timing of a horizontal sync signal

15 corresponding to the emission of the light beam under
control of the first light emission control means; and

image forming means for forming an image on the
basis of the light beam scanned under control of the
scanning control means in correspondence with the
20 emission of the light beam under control of the second
light emission control means.

2. An apparatus according to claim 1, wherein

the image forming means sets a predetermined
process speed from a plurality of different process
25 speeds in a sub-scanning direction, and

the first light emission control means sets a
predetermined timing, which is prepared in advance, in

correspondence with setting of the predetermined process speed, detects the predetermined timing on the basis of the reference clock, and controls the light emission timing of the light emission means.

5 3. An apparatus according to claim 1, wherein
the image forming means sets a predetermined process speed from a plurality of different process speeds in a sub-scanning direction, and

the first light emission control means sets a
10 predetermined timing, which is prepared in advance, in correspondence with setting of the predetermined process speed, detects the predetermined timing on the basis of an image clock corresponding to the reference clock, and causes the light emission means to emit
15 light at a predetermined period to generate the horizontal sync signal at the predetermined period.

4. An apparatus according to claim 1, wherein
the image forming means selects one of a first process speed and a second process speed in a
20 sub-scanning direction when a latent image formed in correspondence with scanning of the light beam is to be transferred to a predetermined medium, and

the first light emission control means sets
a first timing, which is prepared in advance, in
25 correspondence with the setting of the first process speed, counts an image clock corresponding to the reference clock to detect the first timing, and

forcibly causes the light emission means to emit light at a first period to generate the horizontal sync signal at the first period, and sets a second timing, which is prepared in advance, in correspondence with the setting of the second process speed, counts the image clock corresponding to the reference clock to detect the second timing, and forcibly causes the light emission means to emit light at a second period to generate the horizontal sync signal at the second period.

5. An apparatus according to claim 1, which further comprises light amount detection means for detecting a light amount of the light beam emitted by the light emission means and scanned by the scanning control means, and

in which the first light emission control means detects a timing, which is prepared in advance, on the basis of the reference clock, forcibly causes the light emission means to emit light, and controls the light amount of the light beam emitted by the light emission means to a predetermined value on the basis of a light amount detection result by the light amount detection means corresponding to the forced light emission.

6. An apparatus according to claim 1, which further comprises light amount detection means for detecting a light amount of the light beam emitted by the light emission means and scanned by the scanning

control means, and

in which the first light emission control means counts an image clock corresponding to the reference clock to detect a light amount control start timing and
5 a light amount control end timing, which are prepared in advance, forcibly causes the light emission means to emit light in a period of the detected light amount control start timing and light amount control end timing, and controls the light amount of the light beam
10 emitted by the light emission means to a predetermined value on the basis of a light amount detection result by the light amount detection means corresponding to the forced light emission.

7. An apparatus according to claim 1, wherein the
15 first light emission control means counts an image clock corresponding to the reference clock and synchronized with the horizontal sync signal to detect a timing which is prepared in advance, and controls the light emission timing of the light emission means at
20 the preset timing.